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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,464	09/24/2001	Young Keun Kim	120179.0100	5213
21269	7590	09/09/2004	EXAMINER	
PEPPER HAMILTON LLP ONE MELLON CENTER, 50TH FLOOR 500 GRANT STREET PITTSBURGH, PA 15219			PAK, JOHN D	
			ART UNIT	PAPER NUMBER
			1616	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/857,464

Applicant(s)

KIM, YOUNG KEUN

Examiner

JOHN D PAK

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/24/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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Claim 1 is pending in this application.

Applicant is requested to amend the specification to indicate that this application is a 371 of PCT/KR99/00138, filed on March 26, 1999.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 USC 102(b) as being anticipated by JP 9-301734.

JP 9-301734 explicitly discloses a glass composition that contains (see column 1, lines 1-6; see also English abstract, JPAB abstract JP409301734A):

64-70 wt% P_2O_5 ;

13-20 wt% CaO;

7-13 wt% SrO;

3-15 wt% at least one of Al_2O_3 and Ce_2O_3 ; and optionally

0.001-3 wt% Ni, Co, Fe, Rh, Pd, Ti or Ru.

The following composition is encompassed by the scope of the instant invention, which requires 0.2-38 parts by weight P_2O_5 , 0.01-70 parts by weight CaO, 0.01-2 parts by weight Ce, and 0.02-18 parts by weight Sr.

It must be noted that although the claimed components are expressed in terms of parts by weight, said parts by weight are only in relative terms because

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there is no fixed total parts by weight of the claimed composition. Consequently, as long as the relative proportions of the components are satisfied, the claimed feature is seen to be met. Another way of explaining this claim interpretation is that *if* there were 50 total parts in the claimed composition, twice the claimed parts by weight would be found in 100 total parts:

Claim Scope: if 50 total parts32-35 parts by weight P_2O_5 ,

6.5-10 parts by weight CaO,

1.5-2 parts by weight Ce,

3.5-9 parts by weight Sr

Claim Scope: if 100 total parts64-70 parts by weight P_2O_5

7-20 parts by weight CaO

3-4 parts by weight Ce

7-18 parts by weight Sr.

It can be plainly seen that the scope of applicant's claim 1 is such that it encompasses 64-70 wt% P_2O_5 , 13-20 wt% CaO, 3-15 wt% Ce_2O_3 , and 7-13 wt% SrO, as disclosed by JP 9-301734.

It is recognized that the composition of JP 9-301734 is not expressly disclosed as a "multipurpose far-infrared radiation material," but it is the Examiner's position that the identical weight ranges of identical composition components would necessarily provide the same properties. It is noted in this regard that applicant's broad "multipurpose" includes health products (specification page 13, line 6), and the composition of JP 9-301734 is for dental material.

For these reasons, the claim is anticipated.

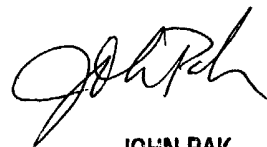
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The drawings are objected to because they are in poor copy. None of the pictures are clear enough to be clearly distinguished or understood. The non-picture figures are partially illegible. A proposed drawing correction or corrected drawings are required in reply to the Office action in order to avoid abandonment of the application. The objection to the drawings will **not** be held in abeyance.

A facsimile center has been established in Technology Center 1600. The hours of operation are Monday through Friday, 8:45 AM to 4:45 PM. The telecopier number for accessing the facsimile machines is (703) 872-9306.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner John Pak whose telephone number is **(571)272-0620**. The Examiner can normally be reached on Monday through Friday from 8:00 AM to 4:30 PM. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Gary Kunz, can be reached on **(571)272-0887**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(571) 272-1600**.



JOHN PAK
PRIMARY EXAMINER
GROUP 1600